

WHAT IS CLAIMED IS:

1. A seat belt retractor comprising:
 - a spool for winding up a seat belt rotatably held in a frame;
 - a bearing attached to a portion of said spool held by said frame;
 - a clutch mechanism arranged on one end of said spool;
 - a pretensioner disposed adjacent to said clutch mechanism; and
 - wherein said spool is made of light alloy, and said bearing is made of steel.
2. The seat belt retractor of claim 1, wherein said pretensioner comprises:
 - a gas generator;
 - a plurality of serial driving members positioned to be accelerated by gas generated from said gas generator;
 - a path for guiding said driving members;
 - a first rotational member having a plurality of levers, wherein said driving members collide with said levers so as to apply rotational torque to said first rotatable member;
 - a second rotational member fixed to said spool; and
 - a clutch mechanism formed by said first rotational member and said second rotational member, wherein
 - said second rotational member being a pinion having external teeth;
 - said first rotational member being a ring gear having internal teeth capable of meshed with the external teeth of said pinion and the levers around the outer periphery thereof;
 - said clutch mechanism becomes in its coupled state where the internal teeth of said ring gear are meshed with the external teeth of said pinion thereby allowing said accelerated driving members to push the levers of said ring gear so as to move said ring gear;
 - said clutch mechanism being in its decoupled state before the activation of pretensioner and switching into its coupled state by the rotation of said first rotational member when the pretensioner is activated.

3. A seat belt retractor comprising:
a rotatable spool for winding and unwinding a seat belt;
a pretensioner operably connected to the spool for rotating the spool to wind
the seat belt;
wherein the pretensioner includes an opening for retaining the spool; and
wherein a bearing is positioned in the opening between the pretensioner and
the spool.
4. The retractor of claim 3, wherein the bearing comprises a material having a
greater hardness than the spool.
5. The retractor of claim 3, wherein the opening is formed in a plate of the
pretensioner.
6. The retractor of claim 3, wherein the bearing comprises a collar.
7. The retractor of claim 3, wherein the spool includes a shaft that extends
through the opening.
8. The retractor of claim 7, wherein the bearing is positioned between the shaft
and the opening.

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